



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1245; Directorate Identifier 2012-NE-41-AD; Amendment 39-17279; AD 2012-24-09]

RIN 2120-AA64

Airworthiness Directives; Lycoming Engines and Continental Motors, Inc.

Reciprocating Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for Lycoming Engines TSIO-540-AK1A, and Continental Motors, Inc. TSIO-360-MB, TSIO-360-SB, and TSIO-360-RB reciprocating engines, with certain Hartzell Engine Technologies (HET) turbochargers, model TA0411, part number (P/N) 466642-0001; 466642-0002; 466642-0006; 466642-9001; 466642-9002; or 466642-9006, or with certain HET model TA0411 turbochargers overhauled or repaired since August 29, 2012. This AD requires removing the affected turbochargers from service before further flight. This AD was prompted by a report of a turbocharger turbine wheel that failed a static strength test at its manufacturing facility. We are issuing this AD to prevent turbocharger turbine wheel failure, reduction or complete loss of engine power, loss of engine oil, oil fire, and damage to the airplane.

DATES: This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Hartzell Engine Technologies, LLC, 2900 Selma Highway, Montgomery, AL 36108, phone: 334-386-5400; fax: 334-386-5450; internet: <http://www.hartzellenginetechnology.com>. You may view this service information at the FAA, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Christopher Richards, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, 2300 E. Devon Ave., Des Plaines, IL 60018; phone: 847-294-7156; fax: 847-294-7834; e-mail: christopher.j.richards@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We received a report of an HET turbocharger turbine wheel that failed a static strength test at its manufacturing facility. Subsequent tests showed that nearly all turbine wheels, P/N 410188-0019, had significant cracking under the surface of a critical weld joint between the turbine wheel head and shaft that occurred during manufacturing. HET has identified by serial number (S/N) the turbochargers shipped from the factory with this unsafe condition. HET has also identified the S/N range of affected turbine wheels. Some of the affected turbine wheels became available for overhaul or field repair since August 29, 2012, and may have been installed. This condition, if not corrected, could result in turbocharger turbine wheel failure, reduction or complete loss of engine power, loss of engine oil, oil fire, and damage to the airplane.

Relevant Service Information

We reviewed HET Alert Service Bulletin (ASB) No. 048, dated November 16, 2012. The ASB lists the known serial numbers of affected turbochargers.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

This AD requires removing the affected turbochargers from service before further flight.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because HET cannot confirm the affected turbochargers can safely be used. Therefore, we find that notice and opportunity for prior public comment are impracticable and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2012-1245 and Directorate Identifier 2012-NE-41-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

Costs of Compliance

We estimate that this AD affects 56 airplanes of U.S. registry with affected turbochargers installed. We also estimate that it will take about 4 hours to remove a turbocharger from service. The average labor rate is \$85 per hour. Based on these figures, we estimate the total cost of the AD to U.S. operators to be \$19,040.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs" describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2012-24-09 Lycoming Engines and Continental Motors, Inc. Reciprocating Engines: Amendment 39-17279; Docket No. FAA-2012-1245; Directorate Identifier 2012-NE-41-AD.

(a) Effective Date

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Lycoming Engines TSIO-540-AK1A, and Continental Motors, Inc. TSIO-360-MB, TSIO-360-SB, and TSIO-360-RB reciprocating engines with any of the following turbochargers installed:

(1) Hartzell Engine Technologies (HET) model TA0411 turbochargers, part numbers (P/Ns) 466642-0001; 466642-0002; 466642-0006; 466642-9001; 466642-9002; and 466642-9006, with serial numbers (S/Ns) listed in Table 2 of HET Alert Service Bulletin No. 048, dated November 16, 2012, installed.

(2) HET model TA0411 turbochargers having a turbine wheel, P/N 410188-0019, with any of the turbine wheel S/Ns H120716 through H121988, installed.

(3) HET model TA0411 turbochargers overhauled or repaired since August 29, 2012, using a turbine wheel, P/N 410188-0019, with any of the turbine wheel S/Ns H120716 through H121988, installed.

(d) Unsafe Condition

This AD was prompted by a report of a turbocharger turbine wheel that failed a static strength test at its manufacturing facility. We are issuing this AD to prevent turbocharger turbine wheel failure, reduction or complete loss of engine power, loss of engine oil, oil fire, and damage to the airplane.

(e) Compliance

Before further flight, remove from service the turbochargers identified in paragraph (c) of this AD, unless already done.

(f) Special Flight Permits

Special flight permits are permitted provided that:

- (1) The flight is limited to three hours.
- (2) The turbocharger boost is set to “Off” in the cockpit (if applicable).
- (3) The wastegate for the turbocharger is safety wired in the locked open position.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Chicago Aircraft Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

For more information about this AD, contact Christopher Richards, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, 2300 E. Devon Ave., Des Plaines, IL 60018; phone: 847-294-7156; fax: 847-294-7834; e-mail: christopher.j.richards@faa.gov.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Hartzell Engine Technologies Alert Service Bulletin No. 048, dated November 16, 2012.

(ii) Reserved.

(3) For service information identified in this AD, contact Hartzell Engine Technologies, LLC, 2900 Selma Highway, Montgomery, AL 36108, phone: 334-386-5400; fax: 334-386-5450; internet: <http://www.hartzellenginetech.com>.

(4) You may view this service information at the FAA, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202 741 6030, or go to: http://www.archives.gov/federal-register/cfr/ibr_locations.html.

Issued in Burlington, Massachusetts, on November 29, 2012.

Colleen M. D'Alessandro,
Assistant Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2012-29472 Filed 12/04/2012 at 8:45 am; Publication Date: 12/05/2012]